

## **Teachers' Commitment to the Curriculum and Relevant Parent Opinions: A Case Study on Turkey**

**Şule Fırat Durdukoca**<sup>1</sup>  
Kafkas University

### **Abstract**

The study examines teachers' commitment to the curriculum applied in the classroom and relevant parent opinions. The qualitative case study design was used in the research. The research sample comprises four preschool teachers selected by the contingency sampling and eight parents selected by the criterion sampling. The data were collected through interview and document analysis techniques and analyzed with content analysis. It was found that the devotion of teachers working in private schools to the curriculum is higher than public school teachers. The teachers applied program adaptations within the scope of rearrangement, expansion and omitting patterns. As the adaptation factors are classified under 5 categories as "the influence of school administration, professional experience, the student readiness factors, parent expectation, and teacher interest in the subject. It has been determined that the public school students' parents have more positive opinions about the program followed in the classroom compared to the private school students' parents.

**Keywords:** Commitment to Curriculum, Curriculum Adaptation, Adaptation Patterns

**DOI:** 10.29329/ijpe.2021.366.14

---

<sup>1</sup> **Şule Fırat Durdukoca**, Assoc. Prof. Dr., Kafkas University, Dede Korkut Faculty of Education, Department of Special Education, ORCID: 0000-0001-8864-3243

**Email:** drsulefirat@gmail.com

## INTRODUCTION

Due to the centralized structure of the education system in Turkey, all educational institutions apply the curriculum (official programs) developed by the Ministry of National Education (MNE). Contemporary scholarship revealed that some teachers do not follow official programs and there are significant differences between official programs and the applied programs in classrooms (Bümen & Yazıcılar, 2020; Bütün & Gültepe, 2016; Öztürk, 2012; Tokgöz, 2013; Yazıcılar, 2016). The reason behind this difference is that teachers adapt the curriculum for various reasons.

Adapting the curriculum; is defined as “important changes made by teachers on the curriculum such as changing the structure, purpose and activities of the lesson” (Sherin&Drake, 2009), and “executors’ use of their design elements also, in their curriculum” (Brown&Edelson, 2003, p.7). The studies on adapting curricula, it is observed that adaptation patterns differ, and adaptations made for the same purpose are designated with different patterns. Janney and Snell (2004) detailed adaptation patterns such as *supplementary* (adding new goals to the lesson), *simplified* (reducing the difficulty level of the lesson) and *alternative* (rearranging the activity to be applied in the lesson). Moreover, Sherin and Drake (2009) described adaptation patterns as *omitting* (neglecting a planned part of the lesson without replacing it), *replacing* (changing the order of the subject or the way the activities are applied) and *create* (creating new materials in the transition between activities, between schoolwork and homework). Davis, Beyer, Forbes and Stevens (2011) also categorized these patterns as *change* (changing the application style of the subject to be taught, some parts of the activities in the lesson plan, teaching methods and techniques, subjects and the order of teaching the subjects, the worksheet), *add* (adding new activities based on research and practice, informative texts, topics, worksheets, providing additional support), *remove* (removing the activity, topics, teaching methods and techniques, worksheets used in the lesson plan, providing less support to the student than those suggested in the course plan). Furthermore, Meidl and Meidl (2011) divided the patterns such as *reteaching* (detailing the subject with more explanations), *going deeper* (making the activities difficult according to the student’s level of knowledge). Li and Harfitt (2017) named patterns in their study as *adjusting* (applying the total time specified in the curriculum for the teaching of content, but teaching the same content at different times), *replacing and revising* (replacing the teaching content that is classified as inappropriate with more useful and interesting materials, making changes on the exercises in the textbook), *supplementing and omitting* (adding original materials to facilitate teaching and learning, removing parts of student books that are accepted as impractical or unscathed) and *inventing* (designing the teaching activities and learning tasks). On the other hand, Troyer (2017) classified patterns in his study as *add* (creating activities that are not included in the lesson plans, adding follow-up questions not included in the official program), *change* (changing the aim of the teaching material), *remove* (not processing some pages of the workbook in the official program).

Regardless of its classification, adaptation’s primary purpose is to provide the conditions in which all students can learn, receive proper education and satisfaction (González, 2004).

To make effective changes in the curriculum, a teacher needs to use the design elements and materials through "pedagogical design capacity" (Brown, 2009). It is worth examining how and why teachers adapt official programs in line with their pedagogical design capacities. Because while some teachers make adaptations to support and develop programs, others de-capacitate the programs through inefficient adaptations (Brown & Campione, 1996; Collopy, 2003; Remillard, 1999). The research question is what level of commitment teachers should have to the curriculum. The issue of adapting the curriculum is also related to the commitment to the program.

Commitment to the curriculum is defined as “determining the compatibility between the designed program and the implemented program” (Furtak et al., 2008, p.362), “the determination of how well programs are implemented compared to the original program design” (Mihalic, 2004, p.83). The domestic literature trumps two different teacher profiles in terms of adherence to the curriculum as ones who apply the curriculum as designed (Özdemir, 2012; Şahin&Kumral, 2013) and others

change the official programs due to not adopting the basic philosophy of program (Çiftçi, Akgün & Deniz, 2013; Kuduban& Aktekin, 2013), thinking that they are not competent to fully implement the programs (Atila, 2012), not able to establish a relationship between the attainments and activities (Saraç& Yıldırım, 2019), and to cover some important issues in the content due to inadequacy of physical conditions (Aktaş&Erdoğan, 2012), replacing some activities in the program due to lack of materials (Alabaş & Kamer, 2007), shaping the course outcomes according to the national exam contents (Alabaş & Kamer, 2007; Menteşe, 2013) and student success (Seçkin,2011).

Which of these two different teacher attitudes the MNE approves is important in terms of the implementation of the programs following their objectives. The Ministry stated that the principle of flexibility was adopted in the curriculum, and it was expected that the necessary adaptations are made by teachers in reaching the program outcomes (MNE, 2018). Teachers have the initiative to adapt official programs to local needs, and teachers are empowered to take responsibility in Turkey. It is considered that studies on determining the teacher commitment with participants who apply the same curriculum but work in different schools at the same level of education and determining why and how they adapt the curriculum will contribute to curriculum development and teacher training literatures. Moreover, the purpose of the research is; examining teacher commitment to the curriculum in schools which has differences in aspects of a student-parent profile, purpose, educational material institutional features, and parent opinions about the curriculum applied in the classroom. As a participant of the curriculum, parent view about the program implemented in the classroom, shall provide important clues in determining the factors affecting teacher commitment to the official program. The study endeavors answers to the following sub-problems:

1. What is the level of teacher commitment to the curriculum?
2. What are the curriculum adaptation patterns of teachers?
3. What are the factors affecting teacher commitment to the program?
4. What are the parent opinions about the curriculum applied in the classroom?

## **METHODOLOGY AND METHODS**

### **Research Design**

The case study design was preferred in the study. Preschool Education Program (official program) for 60-72 Months Children has been accepted as the case. In official programs prepared for all education levels, although it is not clearly stated which element of the curriculum teachers can stick to and adapt to, it is clearly stated that all elements of the curriculum can be adapted in the preschool curriculum (MNE, 2013, p.14). Therefore, the pre-school curriculum is considered as the case in the study.

### **Research Sample**

The sample comprises 4 preschool teachers selected through contingency sampling and 8 parents selected with criterion sampling. Two of the teachers work in public and two in a private school. While the professional experience of public school teachers are 9 and 15, the private school teachers have professional experience of 9 and 5. Besides, one of the public school teachers is having a Ph.D in preschool education. Both public school teachers have one fusing student in their class. The average parental education level of private school teachers is undergraduate, and public school teacher average is high school. Moreover, a homogeneous classroom practice was conducted in the private school, while students were subjected to pre-evaluations monitoring their development progress before being accommodated to different classrooms. The public school students are registered to schools based on an address system. While public school teachers prepare their lesson plans, private school

teachers apply the lesson plans prepared in advance by the school head quarters usually in a different city.

The criteria of having information about the preschool curriculum and voluntary participation in school activities were taken into account in the selection of the parents. Moreover, the suggestions of the teachers and the school administration were considered, and a total of 17 parents who were shortlisted for the study were reached. The study purpose was explained, and a semi-structured interview form prepared by the author was applied to them. It was observed whether the parents had information about the preschool education program. Eight parents who fulfil the criteria listed above and wanted to participate in the research voluntarily were determined. Four of the parents are from the private school, and four of the teachers' working in the public school. Four parents have a Ph.D. and six are education faculty graduates. All participants stated that they have examined the preschool curriculum and they have positive opinions about the program elements and features except for the attainment item.

### **Data Collection Tools**

The data were collected through interview and document analysis during the fall semester of the 2019-2020 academic year, in October and December. Interviews were used to determine the teacher commitment level to the curriculum, program adaptation patterns and the opinions of the parents about the curriculum applied in the classroom. As the document analysis was utilized to determine the factors behind their commitment to the curriculum.

Data collection started with the analysis of monthly plans. Before each academic day, teachers were contacted (telephone calls, e-mail communication, face-to-face communication), daily lesson plans were requested, information about the structure and functioning of the lesson, and parental participation in the class was obtained. The commitment level to the daily lesson plans to the monthly plan, and the official schedule was examined by the author. At the end of the daily lesson process, teachers were contacted again, their plans were requested, and information was obtained about their commitment to the plans. The author analyzed whether the adaptations (if any) were reflected in the daily plans, why they needed the adaptation, for which element(s), whether a resource was used as a guide in the adaptation process, and the parent participation in the learning process in the classroom was also examined. Interviews were completed in an average of 20 minutes. The semi-structured interview form prepared by the author was used for the interviews. There were ten questions in the form prepared in line with the sub-problems. The questions were presented to an expert in program development and their suitability for the purpose was evaluated. Moreover, the clarity and comprehensibility of the questions were examined by two preschool teachers who were not included in the research.

Furthermore, parent interviews were performed under the teacher guidance, and pre-and post-lesson interviews were held in the classroom with parents. The data were collected about why and how the parents would participate in the learning process before the lesson with the interview form prepared, and the definition of this participation in the official program was examined. Parent opinions on whether the in-class participation attracted the attention of the learners, it created an awareness among the learners, and the activity should be repeated were obtained after the lessons. Interviews were completed in an average of 15 minutes.

### **Data Analysis**

First, the coding sheet was created in line with the adaptation patterns in the literature. The findings were arranged according to this coding sheet, and the adaptations made for similar purposes to the adaptations in other studies were presented under the same pattern. Adaptations opposing the literature were patterned by the author. Moreover, the coding for adaptation patterns were designed in this study, and the purpose of the pattern was detailed with it. Patterns are designed as "categories" in

the content analysis, and the scope of the categories is explained by including the codes under the categories. The purpose of adopting such an approach in the analysis is that more than one adaptation can be made for different purposes within a pattern. The interviews with parents were analyzed using the content analysis as they were deciphered, and then categories and codes were created.

The document analysis was applied to the monthly and daily plans that teachers follow in their lessons, their commitment to the official program and each other was examined in terms of the attainments and their priority, the subjects and their order and duration, subject and method of adaptations made in this process, was examined, and presented with the findings. Assessment-evaluation element of the official program and teachers' commitment to the teaching-learning process and program adaptations were excluded from the study. The reason behind this is that the pre-school curriculum does not include application examples for these elements, and the practices for these elements in the program are under teacher's responsibility.

### **Validity and Reliability**

The data diversification method (Yıldırım&Şimşek, 2013) was selected to ensure the internal validity of the study, the consistency and significance of the data collected from different data collection tools were evaluated. The inductive coding and theme creation process was followed in determining deductive and new concepts in the light of the relevant field literature to create a meaningful whole of the emerging concepts. Internal validity was increased by detailing the compatibility of the obtained findings with the previously formed conceptual framework in the data analysis section.

The external validity of the study was ensured through the principle of maximum diversity in the selection of participants, so that the results were applicable for different purposes in different fields. Since the study aims to reveal the difference between the official program and the applied program, teachers who have very different characteristics in terms of workplace, parent profile, lesson plans taken as guides were included in the research sample.

The reliability of the coding sheet was examined first. The transcripts of the interviews with the teachers were examined by the author and a curriculum development specialist working on preschool curriculum together. During the examination process, the expert marked the answers given by the participants to the questions regarding the adaptation patterns in the interview transcripts matching the the relevant adaptation pattern in the coding sheet. Moreover, the marked adaptation patterns were compared, and the coding sheet was finalized. The codes regarding the adaptation patterns were presented to the opinion of two different field experts, and they were finalized through the feedbacks and modifying the coding sheet. The expert opinion was consulted for the reliability of the data generated by the content analysis. The data analysis performed separately by the author and the expert (whose opinion was consulted in the process of the reliability of the coding sheet), the data with a consensus upon it were included in the findings. Differing opinions were discussed over the results. A common decision was reached through the document analysis results and the conceptual framework created before the data analysis when necessary, and the findings were finalized. Findings were supported with direct quotations from teacher and parents. Direct quotations from the information given in the interviews by the public school teachers are connotated with the "PBS" and the private school teachers with the "PRS".

## **RESULTS**

### **Results for the first sub-problem**

The interviews revealed that public school teachers follow the official program at a moderate level and private school teachers at a high level. PBS1 said, "... No, I cannot adhere to the program 100%. But frankly, I'm not changing too much. I have to make some changes..." and stated that he/she

adapted on the program. PBS2 said, “...partially, I can say moderate commitment. Because even though I take care to plan according to the curriculum, I sometimes make changes.” and stated that he/she adheres to the program at a moderate level. PRS1 said, “...I adhere to the plans from the headquarters...these plans are prepared according to the MNE program.... I strictly adhere to the plans coming from the headquarters and the MNE program.” PRS2 said, “...we follow the curriculum. It is a hard task, we follow both the curriculum and the plans from the headquarters exactly...” and expressed his/her high level of commitment to the official program.

The document analysis was applied to the monthly plans prepared by the public school teachers are mostly consistent with the official program and the daily plans with the monthly plans. Teachers did not include field trips specified in the official program in their plans. Although the teachers clearly stated that they had a moderate level of commitment to the official program during the interview process, it was found that they did not reflect the adaptations they made in the lesson plans. In other words, teachers exhibit a high level of commitment to the program informality and a moderate level of commitment in practice. The plans implemented by the teachers in the private school showed that the plans showed a high level of consistency with the official program. These data show that private school teachers are highly committed to the curriculum in formality and in practice.

### Results for the second sub-problem

Table 1 presents information about the adaptation patterns and codes regarding teachers.

**Table 1: Patterns and codes of the teachers**

School type	Adaptation pattern	Code	Purpose of the code and examples
Public school	Rearrangement	Time adjustment	(PBS1) Extending the time allocated for the subject (Extension of the time allocated to “Respect for Differences”)
	Rearrangement	Changing the activity	(PBS1&PBS2) Replace the current activity with a new one (Instead of a nature trip, inviting a parent with a biology education to the class)
	Expansion	Designing activities	(PBS1) Designing an original activity suitable for the subject of the lesson (Teaching some words in sign language about “Respect for Differences”)
	Expansion	Adding attainment	(PBS2) Performing foreign language teaching (Teaching the English equivalents of colours and numbers)
	Expansion	Adding subject	(PBS2) Adding the subjects to be learned in the next education level to the content of the course (Expanding the number counting teaching from 1 to 30)
	Expansion	Reteaching	(PBS2) Repeating the subjects that are not learned enough (Reteaching the concept of right-left with different activities)
	Omitting	Omitting attainment	(PBS2) Omitting pre-planned attainments (Omitting the attainments about backward rhythmic counting, omitting the attainments of explaining the meanings of words for students who do not speak Turkish)
Private school	Rearrangement	Changing the activity	(PRS1&PRS2) Changing the activity Replacing the current activity with a new one (Instead of organizing a trip to the pharmacy, inviting a doctor to the class)
	Expansion	Reteaching	(PRS1) Repeating the subjects that are not learned enough (Reteaching the subject of opposite concepts with different activities)
	Omitting	Omitting activity	(PRS1&PRS2) Omitting the family participation activity without replacing it (cancelling the parent invitation for the end of the year exhibition)

Table 1 shows that teachers’ adaptation patterns are *rearrangement*, *expansion* and *omitting*. The public school teachers’ have higher and more qualified program adaptations than private school teachers. Findings regarding adaptation patterns and codes are presented in the following section.

### ***Rearrangement***

There are two codes within this theme as *time adjustment* and *changing the activity*. The interviews with PBS1, one of the public school teachers, revealed that the teacher spends more time on the subject than planned due to his special interest in “Respect for Differences”, and the adaptation made in this direction is presented under the “time adjustment” code. The teacher's opinion is as follows, “...this topic is also my PhD thesis. It is a subject that I am very interested in, so I devoted more time to this subject than I planned...”(PBS1).

All teachers made similar adaptations in *changing the activity*. It was determined that public school teachers did not include activities related to the field trips, which exist in the official curriculum, their lesson plans, and private school teachers did not implement this activity although they were included in the lesson plans. The rearrangement pattern includes the code of changing the activity as the teachers changed the field trip activities in the official program to achieve the attainment with classroom activities. Teacher views are as follows; “...organizing a trip is hard work. Parents are causing a lot of trouble. Instead, it is easier to bring the expert to the classroom...”(PBS1); “...yes, the program includes trips but...organizing trips is very difficult and takes time, getting permission from the principal, getting permission from the governor's office, most importantly, the parents...I don't want to have this burden...”(PBS2), “... It was written in the plans that we had to organize a trip to the pharmacy, but at the meeting we held, the school principal decided that we could not do this practice due to reasons such as the negative attitude of the families...We combined both classes, asked a parent, he/she came to school, and informed the children...”(PRS2).

### ***Expansion***

This pattern comprises codes for *designing activities*, *adding attainments and subjects*, and *reteaching*. The interviews with PBS1 showed that the teacher designed original activities on the subject of “Respect for Differences” and implemented these activities. “...The activities in the market regarding this issue are insufficient, there is a need for more striking and more appropriate activities. That's why I designed and implemented an activity myself...”and explained his/her opinion. This adaptation is presented in Table 1 with the code “designing activity”.

The interview with PBS2 revealed that he/she included the attainments and subjects not in the official program in the teaching-learning process, taking into account the parent requests and the student readiness level. The teacher stated that the attainments regarding foreign language learning are not included in the official curriculum but the parents asked him/her to support the children in this regard since there are courses for foreign language teaching in private schools. Moreover, the teacher stated that he/she expanded the content of a subject in the official program by adding teaching subjects in the next education level, considering the parent expectations and the students' current performances. These adaptations were coded as “adding attainment” and “adding subject”. The teacher's opinion is as follows, “...I also taught English numbers and colours. Officially, there is no such attainment in the program, but parents demand it, the cognitive development of the students is good. I added these informal attainments to my lessons...I also taught unofficial subjects. I had my students rhythmic counting from 1 to 30, not to 20.”

The interviews with public school teacher PBS2 and private school teacher PRS1 indicated that they repeat the subjects they thought the students could not learn enough with different activities at different times. PBS2: “...today I have observed that right and left concepts are confused. Actually, I had no plan to go back to that topic today, but I had to rework the subject with a few activities...” PRS1: “The topic of contrasting concepts was not included in the current plan, but I noticed the students could not understand the subject, I quickly performed an activity, and I reviewed that subject...” This adaptation made by teachers in the teaching-learning process is presented under the code of “reteaching” in Table 1.

### ***Omitting***

There are two codes in this pattern as *omitting attainment* and *omitting activity*. One of the public school teachers, PBS2, adapted the omitting attainment, and the private school teachers made the omitting activity adaptation. PRS2 stated that he/she neglected some of the attainments in the official program because the student readiness level was adequate. Private school teachers stated that they neglected the activities based on family participation in the official curriculum and lesson plans because discipline problems might be experienced in the classroom. The views of the teachers are as follows, “...*the student cannot count forward rhythmically, so it is not possible for him/her to count backwards rhythmically either. That's why I passed that attainment....I have students who do not speak Turkish. I have to omit the attainment of explaining the meanings of the words that I think are above the language development level of these students...*”(PBS2), “*There was an activity that requires family participation, we made a joint decision with the other teachers and the principal, and then we cancelled this activity, adverse behaviours might occur since the classes are crowded*” (PRS2).

The document analysis suggested that public school teachers applied changing the activity under the rearrangement pattern in their lesson plans. The remaining adaptations were determined in the teacher interviews. Although private school teachers made the adaptations specified in Table 1, they did not reflect any of these adaptations in the plans sent to them. This shows that private school teachers are not highly committed to official programs in practice, as they stated in the first sub-problem.

### ***Analysis of the data collected for the third sub-problem***

Teacher views on the factors behind their commitment to the curriculum was collected under 5 categories as the influence of school administration, professional experience, the student readiness factors, parent expectation, and teacher interest in the subject.

Under the influence of school administration category, private school teachers stated that the school administration is an element of pressure on adherence to the official program and that they cannot make the adaptations they want in the programs. PRS2 said, “...*We have 4 branches in this school...I cannot do anything different from them....Actually, I am very complaining about this situation. I see some glitches, but I can't do anything. For example, I want to omit some attainments, but I give up when the principal calls me to account...*” and stated his/her opinion.

Public school teachers stated that the in-class control authority of the school administration is an element of pressure on them, and therefore, they cannot reflect the program adaptations in their lesson plans. PBS1 said, “...*I do not reflect adaptations in my plans. If you examine my plans, you'll see that I adhere to the curriculum. Officially, I am preparing my documents according to the schedule in order not to have any problems in the inspection...*” and expressed his/her opinion. PBS2 said, “...*the principal has the authority to review my lesson plans, just in case I do not write everything I do in my plans because I do not know how the principal will approach adaptations. Maybe I'm writing small changes to the plan.*” and stated that he/she agreed with PBS1.

Within the professional experience category, public school teachers expressed that there is a correlation between experience and commitment to the program as they try to fully adhere to the official program at the initial phases of their profession. Over time, with their experience, field knowledge, pedagogical and teaching profession, structure of schools, general characteristics of administrators, etc. increase, their commitment to the program decreases. “*Of course, I was inexperienced in the first years of profession, I thought that I must adhere to the program exactly...Over time, I realized that no program can be completely adhered to.*” (PBS1). Private school teachers expressed similar views. Teachers stated that with their increasing professional experience during their professional experience, they can predict how they adapt the activities, and how the

success levels of the learners can increase. “...*I can say I have improved a lot over time. Now, looking at the activities from the headquarters, I can say that this activity is not suitable for my children, I may have a discipline problem, and I can say that it would be better for my children if I make this adaptation in this activity...*” (PRS1)

Public school teachers stated that students’ level of readiness affected adherence to the curriculum in the student readiness level category. They stated that they moved away from the commitment to the program and adapted the program in the form of adding a topic or attainment in a classroom made up of students with a high level of readiness. On the contrary, they admitted to neglect the attainments or topics in the program. It is provided in Table 1 that PBS2 reflects these opinions directly to the application. “...*The most essential element of education is the student, since we are teaching for them, we must take their readiness into account. Accordingly, I choose an activity, I apply it, if necessary I adapt.*” and PBS2 expressed his/her opinion on the subject.

All the teachers stated that parent expectations from the preschool curriculum are high within the parent expectation category. They want to implement the activities that will increase the cognitive development of children and preparing them to the first grade of primary school in the classroom environment. However, while private school teachers stated that the parents’ demands in this direction did not affect their commitment to the curriculum due to the pressure factor of the school administration, PBS2 emphasized that while evaluating the demands from the parents in this direction, they also considered the student readiness levels. While PRS1 said, “...*I cannot act according to my own will as a teacher, I cannot take into account the wishes of the parents...*” PBS2 said, “...*I adapt according to the parent request if the student is suitable for it...*”

All the teachers stated that they changed the activities related to field trips outside the curriculum with activities that would enable learning in the classroom during the academic term in which the study was conducted. Teachers stated that this situation, which negatively affects their commitment to the program, is caused by the parent expectations. While PRS2 stated, “...*parents do not want their children to participate in field trips because they think they are safe at school...*” PBS1 said, “...*I cannot apply the field trips in the program. Parents focus on the safety of the trips, not on the educational results, field trips are not allowed much...*”

PBS1 stated an opinion in the teacher interest in the subject category. PBS1 stated that not only the student readiness but also his/her interest affected the commitment to the curriculum and that he/she adapted the program through more activities on the subject one was interested in and spending more time on this subject than the necessary amount.

#### ***Analysis of the data collected for the fourth sub-problem***

Public school students’ parents have directly participated in teaching-learning activities in the classroom at least twice during an academic term. Besides, they conducted a maximum of three activities at home to support learning at school. Private school students’ parents did not directly participate in the teaching-learning activities in the classroom. They carried out at most two activities with their children at home. Parent views on the curriculum applied in the learning environment are categorized under three categories as the *inadequacy of attainments*, the *inadequacy of activities*, and the *influence of school administration on teachers*.

All parents stated, under the category of the inadequacy of attainments, that the attainments of the curricula applied by teachers in the classroom were below the readiness of the students. Moreover, the attainments that would prepare their children more cognitively for the first grade of primary school should be included in the applied program. The opinion of a parent on the subject is as follows: “...*Why would they just learn to count to 20?. They will count up to 100 in the first grade, they can count up to 30 already. The curriculum says to count up to 20...I think the class situation is good, I*

*asked the teacher. He will agree with me that he started counting up to 30...I also want letters to be taught. I think it is important in terms of preparation for literacy...*" (PBS2 Student's Parent 2)

Views in the inadequacy of activities category were grouped under two codes as *diversification* and *participation of families in classroom activities*. Private school students' parents expressed their opinions in the activity diversification code. They stated that the activities of the program implemented in the classroom were insufficient, they wanted to add new activities to the program, but these requests were not met by the teachers.

*"...I went to school and I asked why he didn't do different activities for the children other than painting, reading stories or watching cartoons...Because my child was so tired of painting in every lesson every day. The teacher wanted us to know that he/she could not do anything for me and he/she was also aware of this situation that he/she would meet with the school administration, but that we would not get results much. Whatever the headquarters sends, it is applied. They couldn't get out of it. Frankly, neither I nor my child is satisfied with this system. Sometimes the child does not even want to go to school..."* (PBS1 Student's Parent1)

*"...Students painted a painting on December 3, International Day of Persons with Disabilities. The art teacher of the school gave a picture of a disabled citizen sitting in a wheelchair in the hands of the children and said to paint it. He also sent the dyes made to parents from the whatsapp group. I asked the child in the evening, the meaning of this painting you painted today, what does it mean, what does it mean to be disabled. The child never answered. A 5-year-old can respond to these, but the practice is inadequate. I sent a web page link with sample activities to the teacher. The teacher says I cannot apply these..."* (PRS2 Student's Parent 1)

For parent participation in classroom activities, all parents agreed that they wanted to participate more in classroom activities and criticized the curriculum applied in the classroom in this respect. However, the interviews with the parents revealed that the public school students' parents made more positive statements about this category compared to the private school students' parents. Some of the parent views are as follows, *"...although not often, I go to class to do an activity. I went once to tell fables and once to play puppets. It implies that parents should be involved in the curriculum and family education programs should be organized. Some activities are tried to be done, but they are insufficient..."* (PBS2 Student's Parent2); *"...No, I could not see the child's class for a semester. One parent meeting was held in the classroom that is when I saw the class...They don't invite us to the school to do an activity..."* (PRS1 Student's Parent 1); *"...I saw the child's pictures on the school's Instagram address. The art teacher had a year-end exhibition, we were not even invited to it. I could not see my child's painting in the exhibition. Our teacher then sent home all my child's work with a bag..."* (PRS2 Student's Parent 2).

Parents stated, in the influence of school administration on teachers category, that school administration is also an factor in the effectiveness of the curriculum implemented in the classroom. Public school students' parents stated that they were generally happy to send their children to the public school, and that they found the curriculum in the learning environment successful in general, even though there were some problems. It was mentioned that they realized that the teachers diversified the classroom activities as they wanted and they did not refer to the school administration on this issue. One of the parents said, *"...I think our teacher is very comfortable in the classroom. It seems to me that he is doing the activity he wants. This is partly due to the administration. The fact that the administration is not oppressive causes the teacher to be free, and this affects the success of the program in the classroom..."* (PBS2 Student's Parent 2) and stated his/her opinion. However, private school students' parents expressed negative opinions. Parents stated that the school administration forced teachers to adhere to the plans from the headquarters, and because of the

pressure on the teachers in this direction, teachers could not direct the curriculum they applied in the classroom as they wanted, and they could not even take into account the characteristics of the student profile. The opinion of one of the parents is as follows, “...I don't know if administrations so many interfere with the teacher and in the classroom in every private school, but unfortunately the teacher is not free in this school. Same activities are held in all preschool classes on the same day...then students in all classes are like clones of each other. How can each class be the same? I think if the teacher were a little freer and the pressure on him was relieved, better works would be done and there would be better practices in the classroom ...” (PRS1 Student's Parent 2).

## DISCUSSION AND CONCLUSIONS

As a result of the study, it was determined that all participant teachers showed a high level of commitment to the preschool curriculum in the formality and moderate level in practice. Lappan (1997) stated that today there is a widespread belief that no curriculum is suitable for the teacher and that there are necessary changes that occur when the curriculum changes from a written form to an implemented form. Similarly, Forbes and Davis (2010) stated that even though teachers use curricula as intended, they generally apply them in different ways and change the programs by reinventing them instead of using them as they are.

The results suggest that the adaptation patterns of the participants were *rearrangement*, *expansion*, and *omitting*, public school teachers adapted more on the official program than private school teachers, and the adaptation patterns and codes of private school teachers were similar. All the teachers adapted to change the activity due to family reasons within the scope of the rearrangement pattern. This shows that families -one of the stakeholders of the education system- are one of the factors affecting teacher commitment to curricula. A curriculum aims to create an understanding of the citizens of a nation regarding education. Thus, the curriculum will inevitably be affected by society at the maximum level and the families at the minimum level. Families have a significant share in the effective implementation of curricula (Olibie, 2014). However, families should influence the program to support their children to get program attainments in the desired quality. Otherwise, they may impede the attainment of official programs. Although there are no studies aiming to examine the effects of families on teacher commitment to curriculum or program adaptations, some studies also found that teachers reported that they had family-related problems in the implementation of the curriculum (Erata, 2018; Güven, 2011).

One of the striking findings in the results is that only the adaptation made in the code of changing the activity in the rearrangement pattern of public school teachers is reflected in the formality, which is the lesson plan. Private school teachers did not reflect the adaptations they made in their lesson plans. The main reason why teachers cannot reflect their adaptations on the official curriculum to their lesson plans is the authority pressure, as they clearly stated in the third sub-problem of the research. Classroom practice of teachers in Turkey is carried out by school principals. However, the regulation also gives education supervisors the authority to examine teachers' lesson plans outside the classroom (Official Journal of Turkey, 2014). Therefore, lesson plans and classroom practices are supervised. Teachers stated that they do not want to have any problems with the adaptations made in this inspection process. This result reveals (1) the participant teachers' discomfort with supervision, (2) leads them to uncertainty about how, why, in which element of the program they take place in their curriculum adaptations, and more importantly, their contribution to the program success. The contribution to the program success should be monitored in the adaptations made on the curriculum regarding compliance with the general structure of the program. Each adaptation made by the teachers might not serve the program outcomes. Beyer and Davis (2017) stated that some adaptations might make changes that have adverse effects on the curriculum, and some teachers may not be able to make much-needed adaptations to compensate for the weaknesses of the curriculum and lesson plans. Determining which elements of the formal programs adapted by teachers and for what purpose can be helpful in the following ways, determining the overall comprehensibility of the programs, identifying the functional and non-functional elements of the programs, getting teacher

opinions on how the unproductive program elements will become functional, having an idea about the teachers' professional skills (about their pedagogical design capacities), determining the subjects they need in-service training, having an idea about formal programs will be implemented more effectively by teachers with which professional skills, to be able to evaluate the program literacy levels of teachers in the teaching process (Eryaman & Riedler, 2010). In this case, the purpose of the inspection is important. Studies showing that education inspections are in line with the understanding of bureaucratic accountability (Gündüz&Can, 2014; Deveci&Aykaç, 2019), and national education inspectors primarily check teachers for a high level of commitment to educational programs (Başdemir, 2012) in Turkey. It is necessary to move from a bureaucratic accountability approach to a professional accountability approach in educational supervision in Turkey, and the supervision process should not be an element of pressure on teachers. So that the teachers will be able to freely reflect the changes they make on the official curriculum to their lesson plans without being influenced by any factors. Therefore, clear information can be obtained about teacher's commitment level to official programs, factors affecting adherence, program adaptation patterns, reasons and success of adaptations.

The teachers stated that apart from the school administration and parent expectations, their professional experience, student readiness level and their level of interest in the subject also affected their commitment to the official program. They agree that as their years of service increase, their commitment to the program decreases. Teachers stated that their professional experience increased in their service processes, and as their field, profession and pedagogical knowledge improved, their commitment to the program decreased in a way that contributed positively to the program outcomes. Similarly, in the study of Grossman and Thompson (2008) examining the use of the curriculum of newly recruited English teachers, they found that teachers closely followed the programs when they were just starting their jobs, and they adapted more as they became experienced. This result is consistent with the study of McDonough, Shaw, and Masuhara (2012) in which a teacher attributes various adaptation approaches to one's experiences and professional competence. Moreover, it was determined that public school teachers made adaptations within expansion (attainment and topic addition) and omit (attainment omit) patterns, taking into account the student readiness in official programs. Readiness, which is the sum of learners' the cognitive and affective input behaviours, is an important element that determines the quality of teaching. Anderson and Pichert (1978) stated that an individual's knowledge, experience, and understanding capacity affect what he or she will learn and remember in the future. The public school teachers participated to this study added attainments and topics to the official curriculum by taking into account the learners' affective input behaviours (their interests, attitudes towards the planned learning unit, academic self), and by taking into account their cognitive input behaviours (knowledge levels), they omitted some of the attainments in the program.

One of the public school teachers stated that he/she increased the time allocated to that subject (See: Chart 1, rearrangement/time adjustment), designed original activities specific to the subject (See: Chart 1, expansion/ designing activity) due to his interest in the subject of the lesson. Teachers' adaptations on organizing time and designing activity on one of the contents in the official program in line with his/her area of interest, shall not significantly alter the curriculum. Remillard (2005) stated that teachers use personal resources such as their beliefs, knowledge, goals, and experiences while designing their teaching plans. These personal resources are effective in teachers' decisions about how to use a curriculum, program materials (textbooks, supplementary resources, activities, teaching methods, etc.) in practice (Beyer&Davis, 2012). While evaluating the contribution of the adaptation made here to the program outcomes, the learner needs for adaptation should be taken into consideration as much as the teacher. The student interest in the adapted subject at least as much as the teacher and their positive reactions to the adaptations provide important clues to the teachers and then to the supervisors about the suitability of the adaptation. Kısakürek (1983) asserted that the criterion of interest is very important in the selection and arrangement of the content, regardless of how valid, meaningful and important information we choose, the expected benefit will not be achieved unless the student is interested. The following issue should also be addressed here. Li and Harfitt (2017) presented teachers' adaptations of creating new activities and designing their teaching materials

under the name of “creating” pattern in their study. But in this study, the adaptations of teachers in this direction are presented under the code of “designing activity” in the “expansion” pattern. The reason for moving away from the adaptation pattern in the literature in this part of the study is the purpose of the adaptation. This study assumed that teacher adapts not to design a new activity, but to ensure that the subject he is interested in is learned better with unique activities that will grab the attention of the students, that is, to improve and expand the content of the course with different activities.

The public school students’ parents in this study, criticized the preschool curriculum applied in the classroom for the fact that the attainments were below the developmental level of the children and the activities that would enable them to participate actively in the classroom were insufficient in number. However, the parents stated that apart from these problems, the curriculum applied in the classroom was shaped by the teacher, and they were satisfied with this situation and that the program was successfully implemented. Moreover, private school students’ parents thought that the activities carried out in the classroom were inadequate in terms of quality, they could not actively participate in classroom activities, and pointed to the school administration as the main reason for these negativities while stating that the school administration is a negative pressure on teachers. The parents commonly stated that they were not satisfied with the preschool education program applied in the classroom. It was determined that the participant parents found the program more successful by teachers who adapted the curriculum more in terms of attainments and efficiency. Furthermore, because they were willing to participate actively in the activities implemented in the classroom, teachers are expected to be more committed to the program with this aspect.

The family participation was included in the Pre-School Curriculum for Children of 60-72 Months, and it was also stated that one of the main sections of the teachers’ lesson plan should be “family participation” (MNE, 2013). However, it was determined in this study that especially private school teachers did not include activities that would ensure family participation in school for various reasons in their program adaptations, and they caused families to develop a negative attitude towards the school and the applied program. Although there are no studies examining the effect of this negative attitude on the educational performance of children and their commitment to school with family participation at school, a positive correlation between children's sense of responsibility and low hyperactivity (McWayne et al., 2004), and language skills of kindergarten students (Rimm-Kaufman et al., 2003).

Although this research was carried out with the participation of four teachers, it was observed that there were some gaps between the curriculum applied by teachers and the official program, and teachers needed information about program adaptation. Teachers need the training to increase their professional development in terms of examining formal programs in line with curriculum literacy (understanding the general structure, vision and mission of the program, evaluating program elements according to the features that should be included in these elements, evaluating the ministry's guidance on adherence to the program and making conclusions...), and their pedagogical design capacities. It is suggested to fill this gap on the commitment of teachers in different branches to the curriculum, program adaptations and how these adaptations are perceived by program partners (parents, school administration, education inspector, etc.) with further studies.

## REFERENCES

- Aktaş, M., & Erdoğan, M. (2012). Teachers’ views on metal technology area modular curriculum. *Western Anatolia Journal of Education Science*, 3(6), 91-118. Retrieved on 21 February, 2019 from: <https://dergipark.org.tr/tr/pub/baebd/issue/3337/46224>
- Alabaş, R., & Kamer S. T. (2007). *Sosyal bilgiler öğretim programının değerlendirilmesi: uygulayıcı görüşlerinin nitel analizi*. 1. Ulusal İlköğretim Kongresi (15- 17 November), Hacettepe University, Ankara, Turkey.

- Anderson, R. C., & Pichert, J. W. (1978). Recall of previously unrecallable information following a shift in perspective. *Journal of Verbal Learning and Verbal Behavior*, 17, 1-12. DOI: [https://doi.org/10.1016/S0022-5371\(78\)90485-1](https://doi.org/10.1016/S0022-5371(78)90485-1)
- Atila, M. E. (2012). *Science and technology teachers' perceptions and implementation of constructivist principles in science and technology curriculum*. (Unpublished doctoral thesis), Atatürk University, Institute of Educational Sciences, Erzurum, Turkey.
- Başdemir, Y. H. (2012). Türk eğitim sisteminin yapısal sorunları ve bir öneri. *Liberal Düşünce*, 17(67), 35-53. Retrieved on 11 January, 2020 from: <https://dergipark.org.tr/tr/download/article-file/790789>
- Beyer, C., & Davis, A. E. (2017). Supporting preservice elementary teachers' critique and adaptation of science lesson plans using educative curriculum materials. *Journal of Science Teacher Education*, 20, 517-536. DOI: 10.1007/s10972-009-9148-5
- Brown, M. (2009). The teacher-tool relationship: theorizing the design and use of curriculum materials. In J. T. Remillard, B. Herbel-Eisenman, & G. Lloyd (Eds.), *Mathematics teachers at work: Connecting curriculum materials and classroom instruction* (pp. 17-36). New York: Routledge.
- Brown, A. L. & Campione, J. C. (1996) Psychological theory and the design of innovative learning environments: on procedures, principles, and systems. In L. Schauble & R. Glaser (Eds), *Innovations in learning: New environments for education* (pp 289-325). Mahwah, NJ: Erlbaum.
- Brown, M. & Edelson, D. C. (2003). *Teaching as design: Can we better understand the ways in which teachers use materials so we can better design materials to support their changes in practice?* LeTUS Report Series, Retrieved on 09 March, 2020 from: [http://www.inquirium.net/people/matt/teaching\\_as\\_design-Final.pdf](http://www.inquirium.net/people/matt/teaching_as_design-Final.pdf)
- Bümen, N. T. & Yazıcılar, Ü. (2020). A Case study on the teachers' curriculum adaptations: Differences in state and private high school. *Gazi University Journal of Gazi Education Faculty*, 40(1), 183-224. DOI: <https://doi.org/10.17152/gefad.595058>
- Bütün, M. & Gültepe T. (2016). Teachers' views about implementation of the middle school mathematics curriculum. *Journal of Research in Education and Teaching*, 5, 80-89. Retrieved on 14 April, 2020 from: [http://www.jret.org/FileUpload/ks281142/File/10b.mesut\\_butun.pdf](http://www.jret.org/FileUpload/ks281142/File/10b.mesut_butun.pdf)
- Collopy, R. (2003). Curriculum materials as a professional development tool: How a mathematics textbook affected two teachers' learning. *The Elementary School Journal*, 103(3), 227-311. DOI: 10.1086/499727
- Çiftçi, B. Z., Akgün, L., & Deniz, D. (2013). Teachers' opinions and solution suggestions regarding encountered issues on the ninth grade mathematics curriculum. *Anadolu Journal of Educational Sciences International*, 3(1), 1-22. Retrieved on 23 April 2020 from: <https://dergipark.org.tr/tr/pub/ajesi/issue/1528/18743>
- Davis, E.A., Beyer, C., Forbes, C.T., & Stevens, S. (2011). Understanding pedagogical design capacity through teachers' narratives. *Teaching and Teacher Education*, 27(4), 797-810. DOI: <https://doi.org/10.1016/j.tate.2011.01.005>

- Deveci, Ö., & Aykaç, N. (2019). Evaluation of studies examining the problems experienced in basic: A meta-synthesis study. *Journal of Qualitative Research Education*, 7(1), 277-301. DOI: [10.14689/issn.2148-2624.1.7c1s.13m](https://doi.org/10.14689/issn.2148-2624.1.7c1s.13m).
- Erata, F. (2018). *Investigation of teacher opinions on the application of field trips in pre-school education*. (Unpublished Master Thesis), Selcuk University, Social Sciences Institute, Konya, Turkey.
- Eryaman, M. Y., & Riedler, M. (2010). Teacher-Proof Curriculum. In C. Kridel (Ed.). *Encyclopedia of Curriculum Studies*. Sage Publications.
- Forbes, T. C., & Davis, A. E. (2010). Curriculum design for inquiry: Preservice elementary teachers' mobilization and adaptation of science curriculum materials. *Journal of Research in Science Teaching*, 47(7), 820–839. DOI: [10.1002/tea.20379](https://doi.org/10.1002/tea.20379)
- Furtak, E. M., Ruiz-Primo, M. A., Shemwell, J. T., Ayala, C. C., Brandon, P. R., Shavelson, R. J., & Yin, Y. (2008). On the fidelity of implementing embedded formative assessments and its relation to student learning. *Applied Measurement in Education*, 21(4), 360- 389. DOI: <https://doi.org/10.1080/08957340802347852>
- González, E. (2004). *Necessidades educacionais especiais*. Porto Alegre: Artmed.
- Grossman, P., & Thompson, C. (2008). Learning from curriculum materials: Scaffolds for new teachers. *Teaching and Teacher Education*, 24(8), 2014- 2026. DOI: <https://doi.org/10.1016/j.tate.2008.05.002>
- Gündüz, Y., & Can, E. (2014). *Türkiye'de eğitim denetimi uygulamalarında karşılaşılan temel sorunlar*. V. Uluslararası Katılımlı Eğitim Denetimi Kongresi Bildiri Kitabı, Ankara: Ayrıntı Basım.
- Güven, Z. A. (2011). Teachers' opinions about the Turkish language education programme at second stage of primary school. *The Journal of Buca Faculty of Education*, 29(2011), 121-133. Retrieved on 19 February, 2019 from <https://dergipark.org.tr/pub/deubefd/issue/25122/265287>
- Janney, R. E., & Snell, M. E. (2004). *Modifying schoolwork: Teachers' guides to inclusive practices*, (2nd ed.). Baltimore, MD: Paul H. Brooks.
- Kısakürek, M. A. (1983). Eğitim programlarının hazırlanması ve geliştirilmesi. *Hacettepe Üniversitesi Eğitim Bilimleri Dergisi*, 16(1), 217– 220. DOI: [https://doi.org/10.1501/Egifak\\_00000000922](https://doi.org/10.1501/Egifak_00000000922)
- Kuduban, Ö., & Aktekin, S. (2013). Teacher opinions on the 2005 Turkish literature curriculum: The Case of Trabzon. *Journal of the Black Sea Studies*, 39, 167-186. Retrieved on 19 February, 2019 from [http://karamdergisi.com/Makaleler/2028268293\\_10.%20%c3%96.%20KudubanS.%20Aktekin.pdf](http://karamdergisi.com/Makaleler/2028268293_10.%20%c3%96.%20KudubanS.%20Aktekin.pdf)
- Lappan, G. T. (1997) *Lessons from the Sputnik era in mathematics education*. Oral presentation presented at a National Academy of Sciences Symposium, (6-8 November), Washington, DC. Retrieved on 03 May, 2020 from: <http://www.nas.edu/sputnik/lappan1.htm>
- Li, Z., & Harfitt, G. J. (2017) An examination of language teachers' enactment of curriculum materials in the context of a centralised curriculum. *Pedagogy, Culture & Society*, 25(3), 403-416. DOI: <https://doi.org/10.1080/14681366.2016.1270987>

- McDonough, J., Shaw, C., & Masuhara, H. (2012). *Materials and methods in ELT: A Teacher's guide*. Oxford: Blackwell.
- McWayne, C., Hampton, V., Fantuzzo, J., Cohen, H. L., & Sekino, Y. (2004). A Multivariate examination of parent involvement and the social and academic competencies of urban kindergarten children. *Psychology in the Schools*, 41(3), 363–377. DOI: <https://doi.org/10.1002/pits.10163>
- Meidl, T. D., & Meidl, C. (2011). Curriculum integration and adaptation: Individualizing pedagogy for linguistically and culturally diverse students. *Current Issues in Education*, 14(1), 1-30. Retrieved on 08 May, 2020 from <https://cie.asu.edu/ojs/index.php/cieatasu/article/view/579/148>
- Menteşe, H. (2013). *The Investigation of secondary school Turkish curriculum according to teachers' views*. (Unpublished master thesis), Adnan Menderes University, Social Sciences Institute, Aydın, Turkey.
- Mihalic, S. (2004). The Importance of implementation fidelity. *Emotional & Behavioral Disorders in Youth*, 4(4), 83-105. Retrieved on 19 December, 2020 from <https://www.incredibleyears.com/wp-content/uploads/fidelity-importance.pdf>
- Ministry of National Education (2018). *Öğretim programları*. Retrieved on 07 January, 2021 from: <http://mufredat.meb.gov.tr/Programlar.aspx>
- Ministry of National Education (2013). Okulöncesi öğretim programı. Retrieved on 07 January, 2021 from: <http://tegm.meb.gov.tr/dosya/okuloncesi/ooproram.pdf>
- Olibie, I. E. (2014). Parental involvement in curriculum implementation as perceived by Nigeria secondary school principals. *Journal of Education and Learning*, 3(1), 40-51. DOI: 10.5539/jel.v3n1p40
- Official Journal of Turkey. (2014). *6528 sayılı millî eğitim temel kanunu ile bazı kanun ve kanun hükmünde kararnamelerde değişiklik yapılmasına dair kanun*. Retrieved on 07 January, 2021 from: <https://www.resmigazete.gov.tr/eskiler/2014/03/20140314-1.htm>
- Özdemir, S. M. (2012). Metaphoric perceptions of prospective teachers regarding the concept of curriculum. *Journal of Theoretical Educational Science*, 5(3), 369-393. Retrieved on 14 December, 2020 from <https://dergipark.org.tr/tr/download/article-file/304198>
- Öztürk, İ. H. (2012). Teacher's role and autonomy in instructional planning: The Case of secondary school history teachers with regard to the preparation and implementation of annual instructional plans. *Educational Sciences: Theory & Practice*, 12, 271-299. Retrieved on 27 July, 2019 from: <https://www.researchgate.net/publication/290997243>
- Remillard, J. T. (1999). Curriculum materials in mathematics education reform: a framework for examining teachers' curriculum development. *Curriculum Inquiry*, 19(3), 315-342. DOI: <https://doi.org/10.1111/0362-6784.00130>
- Remillard, J. T. (2005). Examining key concepts in research on teachers' use of mathematics curricula. *Review of Educational Research*, 75 (2), 211–246. DOI: 10.3102/00346543075002211
- Rimm-Kaufman, S. E., Pianta, R. C., Cox, M. J., & Bradley, R. H. (2003). Teacher-rated family involvement and children's social and academic outcomes in kindergarten. *Early Education and Development*, 14, 179-198. DOI: [https://doi.org/10.1207/s15566935eed1402\\_3](https://doi.org/10.1207/s15566935eed1402_3)

- Saraç, E., & Yıldırım, S. M. (2019). Teachers' views on science course curriculum of the year 2018. *Academy Journal of Educational Sciences*, 3(2), 138-151. DOI: <https://doi.org/10.31805/acjes.641002>
- Seçkin, H. (2011). Teachers' views on primary school English language teaching curriculum for the 4th grade. *Journal of Human Science*, 8(2), 551-577. Retrieved on 27 July, 2019 from <https://www.j-humansciences.com/ojs/index.php/IJHS/article/view/1721>
- Sherin, M.G., & Drake, C. (2009). Curriculum strategy framework: Investigating patterns in teachers' use of a reform based elementary mathematics curriculum. *Journal of Curriculum Studies*, 41(4), 467-500. DOI: 10.1080/00220270802696115
- Şahin, A., & Kumral, O. (2013). Pre-Service teachers' images of school curriculum and their curricular roles. *Mediterranean Journal of Educational Research*, 14, 19-32. Retrieved on 19 March, 2020 from: [https://mjer.penpublishing.net/makale\\_indir/332](https://mjer.penpublishing.net/makale_indir/332)
- Tokgöz, Ö. (2013). *Transformation of centralized curriculum into teaching and learning processes: Teachers' journey of thought curriculum into enacted one.* (Unpublished doctoral thesis), Middle East Technical (ODTÜ) University, Institute of Social Sciences, Ankara, Turkey.
- Troyer, M. (2017). Teachers' adaptations to and orientations towards an adolescent literacy curriculum. *Journal of Curriculum Studies*. 51(2), 1-27. DOI: 10.1080/00220272.2017.1407458
- Yazıcılar, Ü. (2016). *Investigation of the teachers adaptation process of the mathematics curricula.* (Unpublished master thesis), Ege University, Social Sciences Institute, İzmir, Turkey.
- Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri.* Ankara: Seçkin Yayıncılık.